III.   REMARKS/ARGUMENTS

A.   Status of the Claims

Claims 1-19 are pending. Claim 1 has been amended. Claims 15-19 have been added. No new matter has been introduced by this amendment or these new claims, and this amendment and these new claims are fully supported by the specification.

Claims 1-14 stand rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by U.S. Patent App. Pub. No. 2004/0054854 to Thiyagaranjan et al. ("Thiyagaranjan") in view of U.S. Patent No. 6,138,158 to Boyle et al. ("Boyle"). Applicants respectfully request reconsideration of the rejections of these claims for at least the reasons discussed below.

B.   "Response To Arguments" Section Of The Office Action

Before addressing the individual rejections, Applicants would like to respond briefly to a remark made in the "Response To Arguments" section of the Office Action. In Applicants' previous response, Applicants distinguished Thiyagaranjan as follows:

> Thiyagaranjan only discloses a hybrid method of updating <u>cache</u>
> <u>memory</u>. <u>See</u> Thiyagaranjan, ¶ 0017. Referring to Fig. 6 of
> Thiyagaranjan, . . . depending on the cache update policies,
> Thiyagaranjan uses notification <u>or</u> periodic updates to refresh the
> cache memory (<u>e.g.</u>, 227, 228, 229) in remote servers (<u>e.g.</u>, 221, 222,
> 223.
>
>   *   *   *
>
> In Figs. 10 and 11, Thiyagaranjan discloses flow charts that illustrate
> the periodic update process and the notification process, respectively.
> Depending on the cache update policy, one of the processes from
> Figs. 10 or 11 is performed on the remote servers. <u>See</u> ¶¶ 53, 54:
> After the process of either figure is completed, the caches (<u>e.g.</u>, 227,
> 228, 229) on the remote servers (<u>e.g.</u>, 221, 222, 223) are updated.

Thiyagaranjan does not disclose any additional messages, notifications, etc. being sent to users (e.g., 230, 231, 232), or that information on users is updated with changed data.

Response Under 37 C.F.R. § 1.113, filed June 12, 2006 at 8-10. The Office Action responded by noting that "'users' are not claimed." Office Action, Page 6. The term "users" is, however, used by Thiyagaranjan to describe, with reference to Thiyagaranjan's Fig. 1, a client computer that is "connected to a server 21 by a data connection 24." Thus, the term "users" that is used in Thiyagaranjan is similar to the phrase "client computer" in the claims of the present application. Applicants were not distinguishing the pending claims from this reference based on "users." Rather, it is the fact that Thiyagaranjan's users, which may be client computers, are not updated by the disclosed method. Applicants' conclusion is that Thiyagaranjan fails to disclose all recited claim limitations of the pending claims.

In this section of the Office Action, the Office Action also cites Figure 5A of Thiyagaranjan to support its assertion that Thiyagaranjan discloses updating a "remote server or client" having a cache memory, and that this "remote server or client" may be "a personal computer or embedded computer system." Office Action, Page 6 (quoting Thiyagaranjan, ¶ [0037]). Applicants do not disagree with this assertion. However, as will be discussed in greater detail below, updating a cache, regardless of where that cache is located, is all that Thiyagaranjan discloses. Thiyagaranjan does not disclose actions that occur after the cache is updated, such as updating information on a client computer. The present application not only claims the step of "performing a periodic refresh of the data cache from the larger database," but it also claims the steps of "sending a message to the client computer;" "automatically requesting the changed data;" and "updating the

information on the client computer with the changed data." Therefore,

Thiyagaranjan's disclosure of updating a cache, even on a client computer system,

does not disclose all elements of the claimed invention.

C.   Claim Rejection Under 35 U.S.C. § 103(a)

Claims 1-14 stand rejected as allegedly rendered obvious by Thiyagaranjan

in view of Boyle. Specifically, the Office Action asserts that Thiyagaranjan

discloses all elements of claim 1 except for the step of "responsive to the message,

automatically requesting the changed data" because Thiyagaranjan "does not

explicitly state . . . [that] accessing the changed data responsive to the message is

particularly, in the form of a request." Office Action, Pages 2-3. Therefore, the

Office Action refers to Boyle, which allegedly discloses

> sending a notification to a proxy server that forwards the notification
> to the users, which upon receiving the notification, the users can fetch
> the updates, when needed (see abstract); when a notification is sent
> out from one of the server devices that holds an updated information
> subscribed by one of the client devices, the notification is processed
> and sent to the targeted client device; upon receiving the
> corresponding message, the targeted client device is caused to send a
> request to establish a communication session so as to fetch the
> updated information from the server that holds the updated
> information; when the communication session is established and the
> updated information is fetched into the link device that further
> forwards the fetched information to the client device (col. 2, lines 36-
> 52); more particularly, referring to FIG. 8F, after the mobile device
> establishes the communication session with the link device at 845, the
> client device proceeds to request to fetch the updates indicated in the
> received PUSH PDU at 851. The updated information forwarded
> from the link device is received at 861. (col 17, lines 8-13).

Office Action, Page 3. Thus, the Office Action contends that

> [i]t would have been obvious to one of ordinary skill in the art at the
> time the invention was made to include the means of Boyle for

notifying client device users of updates enabling the client device
because generated request for fetching updates utilizes the updates
identified in the notification and the address from the server device
hosting said update[s] thus making the request independent of the
intermediate computer[']s handling [of] the notification particularly
when transmission is over the Internet.

Id. Applicants respectfully disagree, as the Office Action has failed to establish a
prima facie case of obviousness.

In order to establish a prima facie case of obviousness, at least three criteria
must be met. First, there must be some motivation or suggestion to make the
proposed combination or modification of the references. Notably, "the teaching or
suggestion to make the claimed combination must be found in the prior art, and not
based on the applicant's disclosure." MPEP 2142, discussing In re Vaeck, 947
F.2d 488 (Fed. Cir. 1991). Second, there must be a reasonable expectation of
success. Finally, the combined or modified references must teach or suggest all
claim limitations. See MPEP 2142 et seq.

Recently, the Federal Circuit again addressed the requirement for there to be
some motivation or suggestion to combine or modify references:

in making the assessment of differences between the prior art and the
claimed subject matter, section 103 specifically requires consideration
of the claimed invention "as a whole." … The "as a whole"
instruction in title 35 prevents evaluation of the invention part by part.
[Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1275 (Fed. Cir. 2004)].
Without this important requirement, an obviousness assessment might
successfully break an invention into its component parts, then find a
prior art reference corresponding to each component. Id. This line of
reasoning would import hindsight into the obviousness determination
by using the invention as a roadmap to find its prior art components.
Further, this improper method would discount the value of combining
various existing features or principles in a new way to achieve a new
result-often the essence of invention. Id.

Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1337 (Fed. Cir. 2005) (emphasis added). By failing to evaluate the claimed invention "as a whole," the Office Action has done exactly what Princeton Biochemicals warns against -- it has broken the invention into its component parts, and has alleged that there is a prior art reference that corresponds to each claim element. As will be discussed in detail below, however, when the invention is evaluated as a whole, this rejection is clearly improper. Not only is there no evidence of motivation to combine the multiple references identified by the Office Action, but these references, when combined, fail to disclose or suggest all claim limitations.

The Office Action has not set forth evidence of motivation to combine the disclosure of Thiyagaranjan with that of Boyle. Specifically, Thiyagaranjan discloses a hybrid method of updating cache memory in a client server system See Thiyagaranjan, ¶ 0017. Thiyagaranjan does not disclose, based on a change in the cache, updating information on any user devices, such as a client computer. Boyle, on the other hand, discloses a method and apparatus for integrating narrowband and wideband data transports to optimize the use of the wideband channel through use of the narrowband channel. Boyle, Col. 1, ll. 7-11. Boyle specifically is concerned with the limited amount of bandwidth available to wireless, mobile devices, such as personal digital assistants. One seeking to modify a hybrid method of updating cache memory in a client server system such as that disclosed by Thiyagaranjan would not be concerned with the limited bandwidth issues that face wireless, mobile devices.

Further, to the extent the alleged motivation in the Office Action is understood, Boyle would not make the update request "independent of the intermediate computer[']s handling [of] the notification particularly when transmission is over the Internet." Office Action, Page 3. As illustrated in Fig. 2

of Boyle, the communications that are most affected by Boyle are over the "airnet," and involve a narrowband channel and a wideband channel. Thiyagaranjan is not concerned with communications over the airnet.

As illustrated above, the claimed invention has not been assessed "as a whole," and the references cited in the Office Action actually <u>teach away</u> from their combination. It is clear that the only motivation to make the proposed combination stems from the application of impermissible hindsight, something that the Federal Circuit has <u>recently</u> and <u>repeatedly</u> cautioned against. <u>See</u> <u>In re Kahn</u>, 441 F.3d 977 (Fed. Cir. 2006) ("the combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness.") (quoting <u>In re Oetiker</u>, 977 F.2d 1443, 1447 (Fed. Cir. 1992)); <u>see also</u> <u>In re Lee</u>, 277 F.3d 1338, 1342-44 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); <u>In re Kotzab</u>, 217 F.3d 1365, 1370 (Fed. Cir. 2000) ("The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art."); <u>In re Jones</u>, 958 F.2d 347 (Fed. Cir. 1992); <u>In re Fine</u>, 837 F.2d 1071 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

Assuming <u>arguendo</u> that the proposed combination is proper, the combined references fail to disclose or suggest all claim limitations of claim 1. Specifically, Claim 1 recites:

1. A method for updating information on a client computer, the method comprising:

creating a data cache as a subset of a larger database;

performing a periodic refresh of the data cache from the larger database;

identifying change in the data cache;

responsive to the change in the data cache, sending a message to the client computer;[1]

<u>responsive to the message, automatically requesting the changed data</u>; and

<u>updating the information on the client computer with the changed data</u>.

Appl'n, Claim 1 (emphasis added).[2] Contrary to the Office Action's assertion, however, Boyle does not disclose the step of "responsive to the message, automatically requesting the changed data." Instead, Boyle <u>expressly</u> discloses that, when a notification is received, the mobile device "reacts according to the action type as to how to make a user of the mobile device 106 aware of the update . . . ." Boyle, Col. 7, ll. 46-48. The <u>user</u> of the mobile device is required to manually request the update -- the user device does not <u>automatically</u> request the update. Boyle, Col. 16, ll. 50-54. Therefore, Applicants respectfully request that the rejection of independent claims 1, 11-14, and all claims dependent thereon, be withdrawn.

In addition, as discussed in Applicants' Response Under 37 C.F.R. § 1.113, filed June 12, 2006 on pages 8-10, Thiyagaranjan does not disclose "[a] method for updating information on a client computer;" "responsive to the change in the data cache, sending a message to the client"; and "updating the information on the client computer with the changed data" because Thiyagaranjan only discloses a

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[1] Applicants have amended claim 1 to clarify that, responsive to change in the data cache, the message is sent to the client computer.

[2] Independent claims 12, 13, and 14 recite limitations similar to those in independent claims 1 and 11.

hybrid method of updating <u>cache memory</u>. <u>See</u> Thiyagaranjan, ¶ 0017. Thiyagaranjan does not disclose updating both a data cache and information on the client computer. With reference to Figs. 10 and 11, Thiyagaranjan discloses that, depending on the cache update policy, one of the processes from Figs. 10 or 11 is performed on the remote servers. <u>See</u> ¶¶ 53, 54: After the process of either figure is completed, the caches (<u>e.g.</u>, 227, 228, 229) on the remote servers (<u>e.g.</u>, 221, 222, 223) are updated. <u>Thiyagaranjan does not disclose any additional messages, notifications, etc. being sent to client computers</u> (<u>e.g.</u>, users 230, 231, 232), <u>or that information on client computers</u> (<u>e.g.</u>, users 230, 231, 232) <u>is updated with changed data</u>. Therefore, Thiyagaranjan does not disclose that the client computers (<u>e.g.</u>, users 230, 231, 232) are sent a message "responsive to the change in the data cache," that the client computers (<u>e.g.</u>, users 230, 231, 232) "automatically request[] the changed data" responsive to the message, or "updating the information on the client computer with the changed data."

Boyle does not cure this deficiency. Therefore, Applicants respectfully request that the rejection of independent claims 1, 11-14, and all claims dependent thereon, be withdrawn.

In addition, claim 7 recites that the message of claim 1 "has at least two states, one state indicating no change in the data cache, and the other state indicating change in the data cache." The Office Action alleges that Paragraph [0015] of Thiyagaranjan discloses this element. This paragraph, which discusses the notification cache update method, only discloses a message having one state -- a state indicating "data changes in [a] data store". Thiyagaranjan, ¶ [0015]. Thiyagaranjan describes this method further:

> Notification relies on the data store 205 to notify remote server 221
> that data in the cache is inconsistent with the data stored on the data
> store. Data store 205 maintains a record of what information remote

server 221 has in its cache. <u>When changes are made to a piece of data
that resides on the cache on the remote server 221, the data store 205
notifies the remote server 221 that data has changed</u>. Accordingly,
after receiving notification, the remote server 221 accesses the data
store 205 for the data updates. To alleviate performance and security
concerns, a dedicated communication link is often used for
notification and updates

<u>Id.</u> Thus, in addition to the reasons set forth above with regard to independent
claim 1, because Thiyagaranjan does not disclose that the message of claim 1 "has
at least two states, one state indicating no change in the data cache, and the other
state indicating change in the data cache," Applicants respectfully request that the
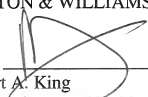rejection of this claim be withdrawn.

IV.   CONCLUSION

Applicants respectfully submit that the application is in condition for
allowance. In the event any fees are necessary, please charge such fees, including
fees for any extensions of time, to the undersigned's Deposit Account No. 50-
0206. Should any outstanding issues remain, the Examiner is invited to telephone
the undersigned at the number listed below.

Respectfully submitted,

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